## WHAT IS CLAIMED IS:

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1. A positive electrode active material for a secondary battery comprising a lithium manganate and a lithium nickelate,

wherein said lithium manganate is a compound having a spinel structure represented by the following formula (1) or said compound in which some of Mn or O sites are replaced with another element:

$$Li_{1+x}Mn_{2-x}O_4$$
 (1)

(in said formula (1) above,  $0.15 \le x \le 0.24$ ).

2. A positive electrode active material for a secondary battery comprising a lithium manganate and a lithium nickelate,

wherein said lithium manganate is a particle compound having a spinel structure represented by the following formula (1) or said compound in which some of Mn or O sites are replaced with another element; and

an Mn elution amount when immersing said particles in a mixture comprising an electrolyte salt and a carbonate solvent is 1000 ppm or less as determined by inductive coupling plasma emission analysis:

3. A positive electrode active material for a secondary battery comprising a lithium manganate and a lithium nickelate,

wherein said lithium manganate is a particle compound having a spinel structure represented by the following formula (1) or said compound in which some of Mn or O sites are replaced with another element; and

a specific surface area of said particles as determined by the BET method is  $0.3~\text{m}^2/\text{g}$  to  $0.8~\text{m}^2/\text{g}$  both inclusive:

$$Li_{1+x}Mn_{2-x}O_4 \qquad (1)$$

10 (in said formula (1) above,  $0.15 \le x \le 0.24$ ).

4. The positive electrode active material for a secondary battery according to any of Claims 1 to 3, wherein said lithium nickelate is a compound represented by the following formula (2) or said compound in which some of Co or O sites are replaced with another element:

$$LiNi_{1-y}Co_yO_2$$
 (2)

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(in said formula (2) above,  $0.05 \le y \le 0.5$ ).

5. The positive electrode active material for a secondary battery according to Claim 4, wherein said lithium nickelate is a compound represented by the following formula (3):

$$LiNi_{1-\alpha-\beta}Co_{\alpha}M_{\beta}O_{2} \qquad (3)$$

5 (in said formula (3) above, M comprises at least one of Al and Mn; 0.1  $\leq \alpha \leq$  0.47; 0.03  $\leq \beta \leq$  0.4; and 0.13  $\leq \alpha + \beta \leq$  0.5).

6. The positive electrode active material for a secondary battery according to any of Claims 1 to 3, wherein said lithium nickelate is a compound represented by the following formula (4):

$$LiNi_{1-p-q}Co_pM_qO_2 \qquad (4)$$

5 (in said formula (4) above, M comprises at least one of Al and Mn;  $0.1 \le p \le 0.5$ ;  $0.03 \le q \le 0.5$ ; and  $0.13 \le p + q < 1$ ).

7. The positive electrode active material for a secondary

battery as claimed in any of Claims 1 to 6, wherein when a weight ratio of said lithium manganate to said lithium nickelate is a: (100-a), "a" is in a range of  $20 \le a \le 80$ .

- 8. A positive electrode for a secondary battery comprising said positive electrode active material for a secondary battery as claimed in any of Claims 1 to 7 which is bound via a binder.
- 9. A secondary battery comprising at least a positive electrode and a negative electrode, comprising said positive electrode active material for a secondary battery as claimed in any of Claims 1 to 7.
- 10. The secondary battery as claimed in Claim 9, wherein said negative electrode comprises amorphous carbon as a negative electrode active material.
- 11. A process for manufacturing said positive electrode active material for a secondary battery as claimed in any of Claims 1 to 7, comprising the steps of:
- 5 mixing an Mn source and an Li source to prepare a first mixture, which is then subjected to a first calcination at a temperature of no less than 800 °C; and

mixing a first-calcination product obtained by said first calcination with said Li source to prepare a second mixture with a higher rate of said Li source than said first mixture, and conducting a second calcination of said second mixture at a temperature of no less than 450 °C and lower than said first calcination to obtain said

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lithium manganate,

wherein a  $D_{50}$  particle size of said Li source is 2  $\mu m$  or less.